DOCUMENT RESUME

ED 286 238 CS 505 704

AUTHOR Olaye, Imafidon
TITLE Mock Jury Decision Process as a Function of Assigned Social Decision Rule.
PUB DATE Nov 86
NOTE 39p.; Paper presented at the Annual Meeting of the Speech Communication Association (72nd, Chicago, IL, November 13-16, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Cognitive Processes; Conflict Resolution; Court Litigation; *Group Behavior; Group Dynamics; Listening; Memory; Peer Influence; Recall (Psychology); Role Playing; Self Directed Groups
IDENTIFIERS Juries; *Mock Trials; Unanimity

ABSTRACT

A study examined the effect of assigned social decision rule (whether a jury is required to give a unanimous or less than unanimous verdict) on the process and product of mock jury deliberations. Subjects, 360 students from an eastern university, were randomly assigned to six-member juries under three decision rule conditions: (1) unanimity, (2) five-sixths majority, and (3) two-thirds majority. After viewing a videotape of a criminal trial, subjects completed a pre-deliberation questionnaire, using the cognitive response method, about the arguments advanced by the prosecution and defense during the trial, and their level of importance to each side. The quantity and quality of arguments recalled were the dependent variables. Subjects then deliberated until the assigned social decision rule was reached. Upon completing deliberation, subjects filled out a post-deliberation questionnaire. The research design employed was a split-plot repeated measures design, with one "between" factor and two "within" factors. Results showed that jurors assigned to unanimous decision conditions recalled significantly more arguments than either majority rule condition, and had significantly higher ratings for the importance of the arguments recalled after deliberation. The findings suggest that unanimous juries are preferable because they recall more ideas to work with in deliberating, and consider the arguments more carefully. Additionally, other members of the jury seem to be persuaded by jurors presenting numerous, compelling, and unique arguments for a particular side. (Six pages of references and eight tables are included.) (JC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED286238

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Mock Jury Decision Process as a Function of Assigned Social Decision Rule

Imafidon Olaye (Ph.D., Ohio University, 1985)

Assistant Professor at William Paterson College

Wayne, NJ 07470

This article is based on a section of the doctoral dissertation of the author at Ohio University, Athens, Ohio.

My special thanks goes to Dr. Ted Foster for his useful comments during the research experiment, and the graduate students who served as helpers during the experiment.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Imafidon Olaye

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

CS505704

Abstract

Mock Jury Decision Process as a Function of Assigned Social Decision Rule.

This study focused on the effect of assigned social decision rule on the process and product of mock jury deliberations. Three hundred and sixty students from an eastern university served as jurors for the experiment. They were randomly assigned into six-member juries under three decision rule conditions: unanimity, five-sixths majority, and two-thirds majority. After viewing a videotape of a criminal trial, subjects filled out a pre-deliberation questionnaire about the arguments advanced by the prosecution and defense during the trial. Subjects deliberated until the assigned social decision rule was reached. Upon completing deliberation, subjects filled out a post-deliberation questionnaire about the prosecution and defense arguments generated during deliberation.

The cognitive response approach was the measurement method utilized in this study. The dependent variables were the quantity and quality of arguments generated and final jury verdict. The split-plot repeated measures design, with one between factor and two within factors was the research design employed. The results showed significant differences in the quantity of prosecution and defense arguments generated by jurors before and after deliberation. A significant difference was found between the decision rule conditions in the quality of arguments generated after deliberation. The multiple discriminant analysis performed indicated a significant relationship between the quantity and quality of arguments generated and final jury verdict.

The Sixth Amendment to the Constitution guaranteeing the right to a fair trial and the subsequent 14th Amendment requiring compliance by the States have been subjected to inconsistent interpretations by the Supreme Court. The lack of consistency can be attributed to the abstract nature of the Sixth Amendment, that has resulted in diversified opinions concerning the exact intent of the framers of the Constitution. Specifically, the Sixth Amendment guarantee of the right to a trial by jury does not include any reference to size, decision rule, or jury selection procedures.

The requirement of unanimity has been traditionally viewed as adding credibility to the decision of the jury. A complete deliberation is an indication that guilt has been found beyond a reasonable doubt, while unanimity ensures that the verdict actually expresses the conscience and aspirations of the community.

Despite the fact that the precise origin of the unanimity rule is unknown, the Supreme Court has always recognized the requirement of unanimity as a component of the Sixth Amendment guarantee of fair trial in criminal cases. However, in two 1972 cases, the Court changed its position by ruling in favor of majority rule in jury decisions. In deciding Johnson v. Louisiana (1972) and Apocada v. Oregon (1972), the Supreme Court stated that the due process clause of the Fourteenth Amendment was not violated by the provision for conviction by less than a unanimous verdict. A major outcome of the Court's decision in Apocada v. Oregon (1972) is the recommendation that States can experiment with new ideas in an attempt to improve the existing criminal justice system.

> In an age in which empirical study is increasingly relied upon as a foundation for decision making, one of the more obvious merits of our federal system is the opportunity it affords each State, if its people so choose, to become a "laboratory" and to experiment with a range of trial and procedural alternatives. (p. 167)

The debate over the appropriate decision rule, as prescribed by the Sixth Amendment, continued until the Supreme Court decided that six-member juries had to be unanimous in Burch v. Louisiana (1979). Daniel Burch and Westle, Inc., the defendants, were convicted of exhibiting obscene motion pictures, under a Louisiana Statute that allowed for a verdict of five out of six jurors. In upholding the Lower Court's decision, the Louisiana Supreme Court reasoned that "if 75 percent concurrence (9/12) was enough for a verdict as determined in Johnson v. Louisiana (1972), then requiring 83 percent concurrence (5/6) ought to be within the permissible limits of Johnson" (p. 838). The Supreme Court disagreed with the Louisiana Supreme Court stating that allowing for non-unanimous six-member juries presents a threat to the preservation of the substance of jury trial as guaranteed by the Sixth Amendment.

The purpose of this study is to find out the role of assigned social decision rule in jury deliberations. It focuses on comparing juries assigned a unanimous decision rule to those assigned five-sixths and two-thirds majority rule in their deliberation processes.

After both attorneys have presented their arguments and evidence, the jury goes into deliberation. The trial process involves persuasive attempts by both the prosecution and the defense aimed at the judge and the jury.

Despite the secrecy of Jury deliberations, researchers have employed various techniques to assemble empirical evidence about jury decision making processes. An appropriate method for a study of this nature is the cognitive response approach. According to the cognitive response approach, persuasion that results from exposure to external messages can be attributed to thoughts generated by recipients. These thoughts generated by recipients are results of information processing called cognitive responses. The cognitive response approach has been used previously to measure attitude change and related variables in persuasion research (Brock, 1967; Greenwald, 1968; Petty et al., 1981).

Since the focus of this study is on the recall and utilization of trial arguments in deliberation, the cognitive response approach appears to be the most appropriate method. It was employed in the gathering of arguments generated by mock juries with different assigned social decision rules.

Previous research, (Tarter, 1983) indicates a significant positive correlation between the arguments generated prior to and after deliberation. In an attempt to understand the relationship between the quantity of arguments generated before and after deliberation in this particular study, the following hypotheses were tested:

1. There is a positive correlation between the quantity of arguments generated by each juror prior to and after deliberation.

2. There is a positive correlation between the quantity of prosecution arguments generated by each juror prior to and after deliberation.

3. There is a positive correlation between the quantity of defense arguments generated by each juror prior to and after deliberation.

The second set of hypotheses explored the relationship between the mean quality ratings of juror perceived arguments prior to and after deliberation.

1. There is a positive correlation between the quality ratings of arguments generated by each juror prior to and after deliberation.

2. There is a positive correlation between the quality ratings of prosecution arguments generated by each juror prior to and after deliberation.

3. There is a positive correlation between the quality ratings of defense arguments generated by each juror prior to and after deliberation.

Decision Rule and Argument Generation

Most of the states allow for majority verdicts in civil cases, but adopt other rules in criminal cases. This lack of uniformity among the States and the ensuing controversy among legal scholars has led to several studies aimed at examining the effect of assigned social decision rule on the jury decision making process.

Previous attempts to employ theoretical and mathematical models in studying social decision rule and group processes have found relationships between individual decision and the ultimate group decision (Davis, 1973; Saks and Ostrom, 1975).

Other studies dealing with assigned social decision rule have found no significant difference on verdict distribution (Bray, 1974; Bray & Struckman-Johnson, 1977; Davis et al., 1975; Hans, 1978; Kerr et al., 1976; Nemeth, 1977).

Saks (1977) conducted an experiment on the effect of size and assigned social decision rule on jury verdicts. The results indicated that no one jury type has superior characteristics and performance. Smaller juries tended to produce more acquittals and large juries had more community representation. There were no significant differences in the verdicts of both types of juries under different decision rules.

Roper (1980) found no significant relationship between different sized

juries under different social decision rules in their accuracy of evidence recall.

Since Burch v. Louisiana (1979), it has become clear that States can require non-unanimous verdicts except in six-member juries. After taking the Court's inability to show that there is a difference between unanimous and five-sixths majority smaller juries and the already discussed research findings, the following three major hypotheses were tested along with four interaction hypotheses for the quantity and quality of arguments generated.

Quantity of Arguments Generated

1. There is a significant difference in the quantity of arguments generated by jurors before and after deliberation.

2. There is a significant difference in the quantity of arguments generated by unanimous, five-sixths majority, and two-thirds majority juries.

3. There is a significant difference between the quantity of prosecution and defense arguments generated by jurors.

Interaction Hypotheses

1. There is no significant difference in the quantity of arguments generated by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries before and after deliberation.

2. There is no significant difference in the quantity of prosecution and defense arguments generated by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries.

3. There is no significant difference in the quantity of prosecution and defense arguments generated by jurors before and after deliberation.

4. There is no significant difference between the quantity of prosecution and defense arguments generated before and after deliberation

by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries.

Quality of Arguments Generated

1. There is no significant difference in the quality ratings of arguments generated by jurors before and after deliberation.

2. There is a significant difference in the quality ratings of arguments generated by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries.

3. There is a significant difference in the quality ratings of prosecution and defense arguments generated by jurors.

Interaction Hypotheses

1. There is no significant difference in the quality ratings of arguments generated by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries before and after deliberation.

2. There is no significant difference in the quality ratings of prosecution and defense arguments generated by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries.

3. There is no significant difference in the quality ratings of prosecution and defense arguments generated by jurors before and after deliberation.

4. There is no significant difference in the quality ratings of prosecution and defense arguments generated before and after deliberation by jurors assigned to unanimous, five-sixths majority, and two-thirds majority juries.

Argument Generation and Final Verdict

Juries are task-oriented groups charged with deciding the outcome of a trial. Social decision scheme is one of the popular probability techniques for measuring the relationship between initial verdict preference and final verdict (Davis et al., 1973, 1975, 1977, 1980; Kerr et al., 1979).

Nemeth (1977), using a majority of four in six person juries, reported that of the 19 juries initially favoring guilty, seven reached a guilty verdict (majority effect) but seven others reached not guilty and five were hung. Stasser et al. (1982) stated that it is easier to raise a reasonable doubt, all things being equal, than to convince a person beyond such doubt.

Decision by jurors are based on evidence presented during the trial that are manifested in their cognitive responses. Petty (1977) has suggested that the rehearsal and learning of cognitive responses is responsible for the delayed effect of persuasive communication. This delayed effect is exemplified by the jurors during deliberation.

Initial argument generation determines initial verdict that has been known to a be a predictor of final verdict. Kerr (1982) has analyzed mock jury deliberations and found that the first faction to lose a supporter never prevailed. In 96% of the cases, the final verdict was predicted by the first opinion shift. The effect of opinion shift on final verdict can be measured in this case, by analyzing the arguments raised by jurors and final jury verdicts.

In an attempt to find out the relationship between the arguments generated and final verdict, discriminant analysis was used to test the following hypotheses.

1. The quantity of arguments generated by jurors is a discriminator between the final verdicts of not guilty, trespass, breaking and entering and hung jury.

2. The quality ratings of arguments generated by jurors is a discriminator between the final verdicts of not guilty, trespass, breaking and entering and hung jury.

3. The quantity and quality ratings of arguments generated by jurors are better joint discriminators between the final verdicts of not guilty, trespass, breaking and entering and hung jury than either quantity or quality taken alone.

Methodology

Subjects

Three hundred and sixty students enrolled in undergraduate communication courses in an eastern University served as subjects for this study. They were solicited from sections of the courses and offered extra credit for participation in the experiment. Subjects were randomly assigned into different social decision rule conditions prior to being exposed to a video-taped trial.

Procedure

Subjects were shown a three-hour video-taped presentation of a trial. The trial was obtained from the Franklin County Courts in Columbus, Ohio. It took place in June, 1975, involving the defendant James E. Harrison. He was charged with breaking and entering a fabric store. The charges filed by the prosecutor also included force, trespass, and intent or purpose to steal. Although the original jury found the defendant guilty of trespass, a strong possibility exists for breaking and entering. This possibility of multiple verdicts makes this case the appropriate stimulus material for a study of this nature.

Before viewing the video-taped trial, subjects were randomly assigned to groups of six and instructed to act as jurors and informed of the decision rule their jury would follow. Instructions were written and care was exercised to see that subjects did not know that there were variations in assigned social decision rule. It required them to list all the arguments they could remember from the trial. Subjects were then instructed to rate their perception of the importance of each argument on a scale from one to seven. The rating of an argument as one indicates that the argument was highly important.

Next, they were asked to identify what side they thought each argument favored. If they thought the argument favored the prosecution, they marked "1"; they marked "2" when undecided; and marked "3" when it favored the defense. The jurors then retired into the deliberation rooms to deliberate until they reached a verdict under their assigned social decision rule. After deliberation, participants were instructed to fill out a second questionnaire. It involved listing all those arguments that were important during deliberation. The arguments were also identified by the side they favored, and rated on a seven point scale for importance. Finally the verdicts of the juries were recorded.

The Split-plot repeated measures design, with one between factor and two within factors was the research design employed. The between factor, assigned social decision rule, had three levels: unanimity, five-sixths majority, and two-thirds majority. Deliberation, the first within factor, was divided into before and after. The second within factor, position, was composed of prosecution and defense segments. The data generated from the experiment was analyzed with the aid of Bio-medical Statistical Packages

including the following: BMDP1V for One-Way Analysis of Variance; BMDP2V for repeated measures; and BMDP4V for Split-plot repeated measures.

To test the specific hypothesis that did not fit the Split-plot design, supplemental designs were employed. Pearson's Product Moment Correlation was used to test the consistency of the cognitive response approach. Multiple Discriminant Analysis and Stepwise Discriminant Analysis were utilized to find out the relationship between argument generation and final verdict.

Methodological Concerns

The generalizability of mock jury research has been questioned by many scholars, and that limitation is applicable to this study. The first major limitation is the use of student jurors. Mock juries were used in this study because of the secrecy of real jury deliberations. The importance of arguments in deliberations makes the cognitive superiority of students, particularly in recall, an advantage. Jurors tend to utilize the arguments they remember from trials as basis for their opinions and decisions during deliberation. Therefore, an increase in the arguments remembered will definitely add to a particular juror's store of information needed for deliberation. Students possess the skills for effective recall and utilization of trial arguments during deliberation.

Saks (1977) suggested that student jurors can sufficiently serve as an alternative for real jurors in experimentation with proper selection procedures. The fact that subjects in this study had various academic majors and were randomly assigned to conditions, make these jurors adequate replacements for real jurors. Kerr (1979) has also indicated that active role-playing can increase the generalizability of any study utilizing

student jurors. The opportunity for extra-credit in this experiment encouraged the subjects to participate, while specific experimental instructions helped these subjects to properly role-play during deliberation.

Another limitation is the use of a video-taped trial for jury viewing instead of a live presentation. Miller (1976) reported that jurors exposed to a video-taped case arrived at similar judgments with those exposed to a live version. The use of video-taped trials can serve as viable alternative to live presentations becuase of the existence of both verbal and non-verbal information. Compared to other modes of stimulus presentation, such as audio and written, the video-taped trial possesses unique qualities that makes it an adequate alternative to live trials. Since students are accustomed to receiving stimulus materials through television, they make the most appropriate subjects for picking up trial relevant arguments that enhance the deliberation process.

The final limitation of this study is the use of six-member juries. Since the Supreme Court's decision in Williams v. Florida (1970) and Ballew v. Georgia (1978), it has become clear that the use of six-member juries is Constitutional. Studies comparing twelve- to six-member juries (Mills, 1973; Kessler, 1973) have found no significant difference between them. The acceptance of the practicality of six-member juries by the courts, social scientists, and legal practitioners, makes the use of six-member juries in this study proper.

Results:

In testing the consistency of the cognitive response approach, subjects were measured for both quantity and quality of arguments generated by jurors before and after deliberation. The results of the Pearson Product

Moment Correlation are presented below:

Insert Table 1 here

As predicted, all the six correlations were positive and significant at the .05 level. There was a positive correlation between the aggregate quantity of argument generated before and after deliberation (r=0.5678). Significant positive correlation was also found between the aggregate quality of arguments generated by jurors before and after deliberation (r=0.4609). Both hypotheses dealing with prosecution arguments showed significant positive correlations between the before and after measures (Quantity r=0.4023, Quality r=0.1635). The final set of hypotheses showed positive correlations between defense arguments generated before and after deliberation (Quantity r=0.4820, Quality r=0.1035).

The results indicate that subjects were consistent in the quantity and quality of arguments generated before and after deliberations. Specifically, jurors that listed few arguments before deliberation listed proportionately fewer arguments after deliberation, while those jurors that listed many arguments before deliberations recorded proportionately many more arguments after deliberations. Similarly, jurors with high quality ratings before deliberation had proportionately higher quality ratings after deliberation, while jurors with low quality ratings before deliberations had proportionately lower quality ratings after deliberation. The cognitive response approach appears to be a reliable measurement instrument across treatments for this particular study.

Assigned Social Decision Rule and Argument Generation

All the interaction effects tested for the quantity of arguments generated were significant except the three way between deliberation (before and after), position (prosecution and defense), and decision rule (unanimous, five-sixths, and two-thirds). The first interaction hypothesis showed a significant interaction between decision rule and deliberation ($F=4.41$, $p=0.0129$). Contrary to the prediction of the second hypothesis, there was a significant interaction effect between decision rule and position ($F=7.15$, $p=0.00009$). An interaction effect was also observed between position and deliberation in testing the third interaction hypothesis ($F=3.28$, $p=0.00006$). As previously mentioned, no significant three way interaction hypothesis was found ($F=2.35$, $p=0.0969$).

No analysis of the main effects was done because of the significant interaction effects. Further analysis was required in this study to enable proper interpretation of the main effects. According to Davidson and Toporek (1981), the examination of simple effects is the next step in the event of an interaction. Simple effect is the examination of one factor holding the other factors fixed.

Before proceeding to the simple effects analysis, it is necessary to examine Table 2 for the quantity of arguments generated before and after deliberation.

Insert Table 2 here

The unanimous juries had a higher mean quantity of arguments generated before and after deliberation than both the five-sixths and two-thirds majority juries. This indicates that unanimous juries in an attempt to

gain required consensus tend to examine more trial arguments than non-unanimous juries. All three jury types were also observed to have generated more arguments before deliberation than after deliberation. An examination of the audiotapes from the study reveals that jurors focused mainly on issues of disagreement during deliberation. The implications of this will be discussed in the conclusion. The simple effects analysis performed because of the significant interactions are presented on Table 3.

Insert Table 3 here

The results on Table 3 indicate a significant difference between the decision rule conditions in the quantity of arguments generated at the pre-deliberation period ($F=16.63$, $p=0.0000$). There was also a significant difference between the quantity of prosecution and defense arguments generated by jurors at the pre-deliberation period ($F=93.04$, $p=0.0000$). No significant interaction was observed between assigned social decision rule (unanimous, five-sixths, and two-thirds majority) and position (prosecution and defense) in the pre-deliberation period ($F=1.93$, $p=0.1471$). However, there was a significant interaction after deliberation between decision rule and position ($F=10.00$, $p=0.0000$), and between prosecution and defense ($F=41.09$, $p=0.0000$). When the quantity of prosecution arguments were considered alone, there was a significant difference between the decision rule conditions ($F=30.83$, $p=0.0000$). The quantity of defense arguments generated also indicates a signficant difference between the decision rule conditions ($F=5.81$, $p=0.0033$).

The simple effects analysis also indicates significant differences between the decision rule conditions in the quantity of prosecution arguments ($F=12.72$, $p=0.0000$) and defense arguments ($F=5.86$, $p=0.0031$) generated. After deliberation, significant differences were observed between the decision rule conditions in the quantity of prosecution arguments ($F=33.70$, $p=0.0000$) and defense arguments ($F=3.82$, $p=0.0228$) generated. The significant interaction effect that required the simple effects analysis was discovered to be after deliberations.

Regarding the quality ratings for the arguments generated, all three jury types rated the prosecution arguments higher than the defense ones. The unanimous juries rated the post-deliberation arguments higher than the pre-deliberation arguments, while both the five-sixths and two-thirds majority juries rated the pre-deliberation arguments higher than the post-deliberation ones. The means and standard deviations for the quality of arguments generated are presented in Table 4.

Insert Table 4 here

Of all the interaction effects tested for the quality of arguments generated only the one between decision rule and deliberation was significant ($F=13.92$, $p=0.0000$). All the others showed no significant interaction. However, it was still necessary to perform the simple effects analysis. The results are presented in Table 5.

Insert Table 5 here

As indicated on Table 5, there was no significant difference between the decision rule conditions at the pre-deliberation period (F=0.40, p=0.6726). There was a significant difference between the quality of prosecution and defense arguments generated by jurors at the pre-deliberation period (F=44.58, p=0.0000). No significant interaction was observed between decision rule and position at the pre-deliberation period (F=0.58, p=0.5593).

The interaction during deliberation between decision rule and position was not significant (F=0.15, p=0.5593). A significant difference was observed between the decision rule conditions in the quality of arguments generated during deliberation (F=16.88, p=0.0000). There was also a significant difference between the quality of prosecution and defense arguments generated by jurors after deliberation (F=17.35, p=0.0000). No significant interaction between decision rule and position was observed after deliberation (F=0.15, p=0.8577).

Regarding the prosecution arguments generated, there was a significant difference between the decision rule conditions (F=6.96, p=0.0011). But at the pre-deliberation period the differences were not significant (F=0.34, p=0.7134). The significant differences between the decision rule conditions in the quality of prosecution arguments generated were observed after deliberation (F=11.86, p=0.0000).

The quality of defense arguments generated by jurors showed no significant differences between the decision rule conditions (F=2.75, p=0.0651). There was also no significant difference between the decision rule conditions in the quality of defense arguments generated at the pre-deliberation period (F-0.55, p=0.5778). But after deliberation a significant difference was observed (F=7.99, p=0.0004).

The significant interaction that led to the simple effects analysis was between decision rule and deliberation. This is expected because the decision rule required of a group and the deliberation process affect the quality of arguments that are generated.

Argument Generation and Final Verdict

Multiple Discriminant Analysis and Stepwise Discriminant Analysis were used to test the hypotheses on the relationship between argument generation and final verdict.

An examination of the final verdicts for the sixty juries in this study showed that none had a verdict of not guilty or hung jury. This limited the analysis to two final verdicts of trespass and breaking and entering.

The first hypothesis was tested to find out the ability of quantity measures to discriminate between the final verdicts of trespass and breaking and entering. The results of the Stepwise Discriminant Analysis are presented in Table 6 below.

Insert Table 6 here

The results indicate that two of the quantity measures entered the stepwise discriminant model. Both after deliberation prosecution and defense arguments were good discriminators between the final verdicts of trespass and breaking and entering. The total percent correct classification of the cases into groups was about 60 (Trespass = 55.4%, Breaking and Entering = 70.6%). The fact that only the post-deliberation quantity measures entered the model shows that deliberation affects the quantity of arguments generated, while the quantity of arguments generated affects the final

verdicts of juries.

The second hypothesis tested whether the mean quality ratings of arguments generated discriminated between the final verdicts of trespass and breaking and entering. The following results were generated from the Statistical Package BMDP7M for Stepwise Discriminant Analysis.

Insert Table 7 here

The results indicate that only the defense quality after deliberations entered the discriminant model. The defense quality after deliberations correctly classified 69.4% of the cases into appropriate final verdict groups. This indicates that the after deliberation mean quality ratings for the defense discriminated between the final verdicts of trespass and breaking and entering.

The final hypothesis compared both quantity and quality measures taken together to either quantity or quality taken alone. Stepwise Discriminant Analysis was utilized in testing the hypothesis that both quantity and quality taken together are better discriminators between the final verdicts of trespass and breaking and entering than either quantity or quality taken alone.

Insert Table 8 here

The findings indicate that both quantity and quality taken together was a better discriminator between the final verdicts of trespass and breaking and entering (71.7% correct) than either quantity (59.7% correct) or quality

(69.4% correct) taken alone.

Conclusions

An examination of the effect of assigned social decision rule on the process and product of jury deliberations reveals important conclusions. First is that the cognitive response approach is reliable across treatments. A significant positive correlation was found in every hypothesis that was tested. The aggregate quantity and quality of arguments showed significant positive correlations between the pre-deliberation measurements and the post-deliberation measurements. Both the prosecution and the defense measures also indicated significant positive correlations. This is quite consistent with previous research (Tarter, 1983). Since studies of this nature concentrate on subjects' utilization of trial arguments during deliberation, the cognitive response approach appears to be the most adequate measurement technique.

Second is that the results of this study indicate that decision rule affects the quantity of arguments generated by jurors. Jurors assigned to unanimous juries generated significantly more arguments than those assigned to five-sixths majority and two-thirds majority juries. There were also differences between the quantity of prosecution and defense arguments generated as a result of decision rule. Does the requirement of unanimity compel jurors to generate as many arguments as possible in support of their positions? As far as these findings are concerned, the answer seems to be in the affirmative. Since six-member juries were used in this study, the results can be related to the Supreme Court's opinion in Burch v. Louisiana (1979). Non-unanimous verdicts in six-member juries was disallowed because, according to the Court, it threatened the Sixth and Fourteenth Amendments. The Court also stated that five-sixths majority juries conflicted with the minimum size principle of at

least six members established in Ballew v.Georgia (1978). Since the differences between non-unanimous and unanimous six-person juries are highly significant, it can be concluded that the Supreme Court was right. However, this cannot support the Court's earlier decision in Apocada v. Oregon (1972), and Johnson v. Louisiana (1972), regarding twelve-member juries.

Jurors are charged with carefully weighing all the evidence in a dispute. They are also required to present their views rationally and to listen to other members. In this case the number of reasoned arguments presented can determine how jurors carry out their most important role. The greater the number of arguments presented and discussed, the greater the effectiveness of deliberations. However, when fewer arguments are presented, as in the case of the majority juries, the opportunity for proper deliberation is hampered.

When the quantity of arguments available to jurors during deliberations is considered in the light of the constitutional requirement of proof beyond a reasonable doubt, it is obvious that unanimous juries are preferable. Since these results indicate that unanimous juries generated more arguments at both the pre-deliberation and post-deliberation periods, it means that they had more arguments to work with in determining the appropriate final verdict. This being the case, the obvious conclusion is that unanimous six-member juries can uphold the proof beyond a reasonable doubt standard.

A third conclusion is that decision rule affects the quality of arguments generated by jurors before and after deliberations. Jurors in the unanimous condition had significantly higher ratings for the importance of the arguments generated after deliberation. These findings indicate that the requirements of unanimity allows for careful consideration of all arguments

during deliberation, which in turn increases the quality ratings for importance given to each argument. According to the cognitive response approach, an increased number of good arguments presented furthers thinking that results in attitude change. The amount and quality of deliberation is determined by the number of reasoned arguments presented during deliberation. The quantity and quality of arguments generated do affect the effectiveness of deliberation. When all three decision rule juries are compared, the unanimity condition appears to be the most effective.

The fourth conclusion is that final verdict can be predicted by argument generation. The results show that the quantity and quality of arguments generated, taken together, has a better discriminatory power than either quantity or quality, taken alone. Both post-deliberation prosecution and defense arguments generated were discriminators between the final verdicts, while only post-deliberation defense quality was the only discriminator between the final verdicts. The content of deliberation (quantity and quality of arguments) discriminates between the final verdicts of trespass and breaking and entering. On the practical level, the ability to relate final verdict to the quantity and quality of arguments generated can aid an attorney in the jury selection process. By selecting jurors that are more likely to raise a large number of reasoned arguments, there is some indication that an effective deliberation will take place. When such jurors are sympathetic to a particular side, the chances of that side winning the case increases because of the persuasive impact of their arguments. This view coincides with Vinokur and Burnstein's (1974) suggestion that the direction and amount of opinion shift resulting from group discussion depends on the number, persuasiveness, and originality of arguments introduced for each

position. In this case, other members of the jury will tend to be persuaded by jurors offering numerous, compelling and unique arguments for a particular position.

All these conclusions do support the decision of the Supreme Court in Burch v. Louisiana (1979) not to allow non-unanimous six-member juries. However, as the cost of criminal justice administration continues to rise, States will look for avenues for procedural change. Non-unanimous decision rule in six-member juries will be an attractive area for States to make these procedural modifications. The decision to disallow non-unanimous verdicts in six-members juries is temporary because of two reasons. First is the recognition of prevailing State practices by the Supreme Court in deciding Burch v. Louisiana (1979). Secondly, Former Chief Justice Burger, and Chief Justice Rheinquist, along with other conservative members of the court do not accept the total incorporation of the Sixth Amendment by the Fourteenth Amendment. This can only mean that as soon as these justices gain a majority, States will be left alone to decide such procedural matters without Federal interference.

References

American Psychological Association. (1983). Publication manual of the the American Psychological Association (3rd ed.). Washington: DC: Author.

Anderson, N. H., & Grasser, C. C. (1976). An information integration analysis of attitude change in group discussion. Journal of Personality and Social Psychology, 34, 210-222.

Apocada v. Oregon, 32 L Ed 2d, U.S. Supreme Court Reports, 1972.

Asch, S. (1973). Studies in Independence and Conformity: A Minority of One Against a Unanimous Majority, Psychological Review, 80, 97-125.

Ballew v. Georgia, United States Report, 1978, 435, 222-245.

Bermant, G., McGuire, M., McKinley, W., & Salo, C. (1974). The logic of simulation in jury research. Criminal Justice and Behavior, 1, 224-233.

Bishop, G. D., & Myers, D. G. (1974). Information influence in group discussion. Organizational Behavior and Human Performance, 12, 92-104.

Bray, R. M., & Kerr, N. L. (1979). Use of the simulation method in the study of jury behavior: Some methodological concerns. Law and Human Behavior, 3, 107-119.

Brehm, J. W. (1966). A theory of psychological reactance. New York: Academic Press.

Brock, T. C. (1962). Cognitive restructuring and attitude change. Journal of Abnormal and Social Psychology, 64, 264-271.

Brock, T.C. (1967) Communication discrepancy and intent to persuade as determinants of counter-argument production. Journal of Experimental and Social Psychology, 3, 269-309

Brooks, W. M., & Dobb, A. (1975). Justice and the jury. Journal of Social issues, 31, 171-182.

Burch v. Louisiana, United States Reports, 1979, 441, 130-138.

Burnstein, W., & Vinokur, A. (1977). Persuasive argumentation and social comparison as determinants of attitude polarization. Journal of Experimental Social Psychology, 13, 315-332.

Cacioppo, J. T., & Petty, R. E. (1979). The effects of message repetition and position on cognitive response, recall, and persuasion. Journal of Personality and Social Psychology, 37, 97-109. (b)

Calder, B. M., Insko, C. A., & Yandell, B. (1974). The relation of cognitive and memorial processes to persuasion in a simulated jury trial. Journal of Applied Social Psychology, 4, 62-93.

Cohen, J. (1977). Statistical power analysis for the behavioral sciences. New York: Academic Press.

Davidson, M. L., & Toporek, J. D. (1981). User's Manual for BMDP4V (URWAS) General Univariate and Multivariate Analysis of Variance. BMDP Technical Report #67. Department of Biomathematics, UCLA.

Davis, J. H. (1973). Group decision and social interaction: A theory of social decision schemes. Psychological Review, 80, 97-125.

Davis, J. H., Kerr, N. L., Atkin, R. S., Holt, R., & Meek, D. (1975). The decision processes of 6- and 12- person mock juries assigned unanimous and 2/3 majority rules. Journal of Personality and Social Psychology, 32, 1-14.

Davis, J. H., Stasser, G., Spitzer, C. E., & Holt, R. W. (1976). Changes in group members' decision preferences during discussion: An illustration with mock juries. Journal of Personality and Social Psychology, 34, 1177-1187.

Duncan v. Louisiana, 391 U.S. 145, (1968). U.S. Supreme Court Reports.

Dunn, O. J., & Clark, V. A. (1974). Applied Statistics: Analysis of Variance and Regression. New York: J. Wiley & Sons.

Foss, R. D. (1976). Group decision processes in the simulated trial jury. Sociometry, 39, 305-316.

Greenwald, A.G., Brock, T.C., and Ostrom, T.M. (1968) Psychological foundations of attitudes. New York: Academic Press.

Hans, V. P. (1978). The effects of unanimity requirement on group decision processes in simulated juries. Doctoral Dissertation, University of Toronto.

Hawkins, C. H. (1962). Interaction rates of jurors aligned in factions. American Sociological Review, 27, 689-691.

Hyman, H. M., & Tarrant, C. M. (1975). Aspects of the American trial jury history, In R. Simon (ed.), The jury system in American: A critical overview. Beverly Hills: Sage.

Institute of Judicial Administration. A comparison of six- and twelve-member juries in New Jersey Superior and County Court. (1972). New York: Institute of Judicial Administration.

Johnson v. Louisiana, (1972). United States Reports, 406, 356-360.

Kaplan, M. F., & Miller, C. E. (1977). Judgments and group discussion: Effect of presentation and memory factors on polarization. Sociometry, 40, 337-343.

Katzer, M. (1976). On camera - The advent of the videotape trials. Albany Law Review, 40, 367-390.

Kerr, N. L. (1981). Trial participants' characteristics/behaviors and juries' verdicts: An exploratory field study. In V. Konecni & E. Ebbesen (Eds.), Social psychological analyses of legal processes. San Francisco, California: W. H. Freeman.

Kerr, N. L., & Bray, R. M. (1982). The psychology of the courtroom. New York: Academic Press.

Kessler, J. (1973). An empirical study of six- and twelve-member jury decision-making processes. University of Michigan Journal of Law Reform, 6, 712-734.

Konecni, V. J., & Ebbesen, E. B. (1979). External validity of research in legal psychology. Law and Human Behavior, 3, 39-70.

Miller, G. R., & Fontes, N. E. (1979). Videotape on trial: A view from the jury box. Beverly Hills, California: Sage.

Mills, J., & Kimble, C. (1973). Opinion change as a function of perceived similarity of the communicator and subjectivity of the issue. Bulletin of the Psychonomic Society, 2. 35-36.

Nemeth, C. (1977). Interactions between jurors as a function of majority vs. unanimity decision rules. Journal of Applied Social Psychology, 7, 38-56.

Ostrom, T. M., Werner, C., & Saks, M. J. (1978). An integration theory analysis of jurors' presumptions guilt or innocence. Journal of Personality and Social Psychology, 36, 336-450.

Parker, C. L. (1980). Legal psychology. Springfield, Illinois: Thomas.

Petty, R. E. (1977). The importance of cognitive responses in persuasion. In W. D. Perrault (Ed.), Advances in consumer research (Vol. 4). Atlanta, Georgia: Association for Consumer Research. (b).

Petty, R.E., Cacioppo, J.T. and Heesacker, M. (1981) The use of rhetorical questions in persuasion: A cognitive response analysis. Journal of Personality and Social Psychology, 40, 332-440.

Pruitt, D. B. (1971). Choice shifts in group discussion: An introductory review. Journal of Personality and Social Psychology, 20, 339-360.

Roper, R. T. (1981). Effect of a jury's size and decision rule on the accuracy of evidence recall. Social Science Quarterly, 62, 352-361.

Ross, H. L., & Blumenthal, M. (1975). Some problems in experimentation in a legal setting. American Sociologist, 10, 150-155.

Saks, M. (1976). Scientific jury selection. Psychology Today, 48-57. (b).

Saks, M., & Hastie, R. (1978). Social psychology in court. Princeton, New Jersey: Van Nostrand-Reinhold.

Sales, B. C. (Ed.), (1979). Perspectives in law and psychology Vol. 2: The jury, judicial and trial processes. New York: Plenum.

Schulman, J., Shaver, P., Colman, R., Emrich, B., & Christie, R. (1979). Recipe for a jury. Psychology Today, 37-44; 77-84.

Shaw, M. (1976). Group dynamics: The psychology of small group behavior (2nd ed.). New York: McGraw-Hill.

Simon, R. J. (1975). The jury system in America: A critical overview. Beverly Hills, California: Sage.

Snedecor, G., & Cochran, W. (1967). Statistical Methods. Ames, Iowa: Iowa State University Press.

Stasser, G., & Davis, J. H. (1981). Group decision making and social influence: A social interaction sequence model. Psychological Review, 88, 523-551.

Tarter, B. J. (1983). An Experimental Analysis of Jury Size and Deliberation Processes. Doctoral Dissertation. Ohio University.

Thompson v. Utah, United States Reports, 1898, 170, 343-361.

Van Dyke, J. (1977). Jury selection procedures. Cambridge, Massachusetts: Ballinger.

Vidmar, N. (1972). Effects of decision alternatives on the verdicts and social perceptions of simulated jurors. Journal of Personality and Social Psychology, 22, 211-218. (a).

Vinokur, A., & Burnstein, E. (1974). The effects of partially shared persuasive arguments on group-induced shifts: A group problem solving approach. Journal of Personality and Social Psychology, 29, 305-315.

Williams v. Florida, United States Reports, 1970, 399, 78-116.

Young, R. K., & Veldman, D. J. (1965). Introductory Statistics for the Behavioral Sciences. New York: Holt, Rhinehart and Winston.

Zeisel, H., & Diamond, S. S. (1974). "Convincing empirical evidence" on the six members of the jury. University of Chicago Law Review, 41, 281.

Table 1

Cognitive Consistency

Arguments generated before and after deliberations	Correlations	Prob.
Aggregate Quantity	0.5678	0.0000
Aggregate Quality	0.4609	0.0000
Prosecution Quantity	0.4023	0.0000
Prosecution Quality	0.1635	0.0000
Defense Quantity	0.4820	0.0000
Defense Quality	0.1035	0.0000

Alpha = 0.05

Table 2

Quantity Measures

	PREDELIBERATION		POSTDELIBERATION	
	Prosecution	Defense	Prosecution	Defense
Mean	4.1580	2.6670	3.3000	1.8670
UNANIMOUS				
S.D.	2.0460	1.7980	1.7080	1.3960
Mean	3.2250	1.9750	2.3580	1.6640
FIVE-SIXTHS				
S.D.	0.6120	0.1294	1.8170	1.5720
Mean	3.0420	2.1500	1.6080	1.3830
TWO-THIRDS				
S.D.	1.6870	0.1500	0.4100	0.4960

Table 3

Simple Effects for Quantity of Arguments

Source	D.F.	F.	Prob.
Pre/SDR	1,357	16.63	0.0000
Pre/Posit	1,357	93.04	0.0000
Pre/Pos/SDR	2,357	1.93	0.1471
Post/SDR	2,357	29.38	0.0000
Post/Posit	1,357	41.09	0.0000
Post/Pros/SDR	2,357	10.00	0.0001
Pros/SDR	2,357	30.83	0.0000
Def/SDR	2,357	5.81	0.0033
Pre/Pros/SDR	2,357	12.72	0.0000
Pre/Df/SDR	2,357	5.86	0.0031
Post/Pro/SDR	2,357	33.70	0.0000
Post/Df/SDR	2,357	3.82	0.2280

Pre = Predeliberation

Post = Postdeliberation

Posit = Prosecution and Defense

Pros = Prosecution

Df = Defense

SDR = Social Decision Rule

Table 4

Quality Measures

	PREDELIBERATION		POSTDELIBERATION	
	Prosecution	Defense	Prosecution	Defense
Mean	5.755	4.641	5.874	5.037
UNANIMOUS				
S.D.	1.458	2.122	1.515	2.440
Mean	5.611	4.810	5.365	4.763
FIVE-SIXTHS				
S.D.	1.450	2.281	2.212	2.587
Mean	5.748	4.942	4.452	3.725
TWO-THIRDS				
S.D.	1.699	2.297	2.929	2.992

Table 5

Simple Effect for Quality of Arguments

Source	D.F.	F.	Prob.
Pre/SDR	2,357	0.40	0.6726
Pre/Posit	1,357	44.58	0.0000
Pre/Pos/SDR	2,357	0.58	0.5593
Post/SDR	2,357	16.88	0.0000
Post/Posit	1,357	17.35	0.0000
Post/Pos/SDR	2,357	0.15	0.8577
Pros/SDR	2,357	6.96	0.0011
Def/SDR	2,357	2.75	0.0651
Pre/Pro/SDR	2,357	0.34	0.7154
Pre/Def/SDR	2,357	0.55	0.5778
Post/Pro/SDR	2,357	11.86	0.0000
Post/Def/SDR	2,357	7.99	0.0004

Pre = Predeliberation

Post = Postdeliberation

Posit = Prosecution and Defense

Pros = Prosecution

Df = Defense

SDR = Social Decision Rule

Table 6

Quantity of Arguments (Discriminant Analysis)

Stepwise Discriminant Analysis Summary

Step #	Variable Entered	D.F.	F	Prob.
1	PostDfQt	1, 358	36.8160	0.0000
2	PostPrQt	2, 357	20.5930	0.0000

Discriminant Function Scores

Variable	Trespassing	Breaking & Entering
PostDfQt	0.70668	0.85000
PostPrQt	0.88498	0.37312
Constant	-2.39229	-1.99739

Classification Matrix

	% Correct	# of cases classified into groups	
		Trespass	Breaking & Entering
Trespass	55.4	143	115
Break & Enter	70.6	30	72
Total	59.7	173	187

Table 7

Quality Discriminant Analysis

Step #	Variable Entered	D.F.	F.	Prob.
1	PostDfQt	1,358	31.439	0.0000

Discriminant Function Scores

Variable	Trespass	Breaking & Entering
PostDfQt	0.72470	0.47494
Constant	-2.50362	-1.47074

Classification Matrix

Group	% Correct	# of cases classified into groups	
		Trespass	Breaking & Entering
Trespass	74.4	192	66
Break & Enter	56.9	44	58
Total	69.4	236	124

Table 8

Discriminant Analysis for Quantity and Quality

Step #	Variable Entered	D.F.	F.	Prob.
1	PostDfQt	1, 358	36.816	0.0000
2	PostDfQl	2, 357	22.365	0.0000
3	PostPrQt	3, 356	16.722	0.0000

Discriminant Function Scores

Variables	Trespass	Breaking & Entering
PostDfQt	0.33374	-0.02633
PostDfQl	0.57769	0.41862
PostPrQt	0.64392	0.41862
Constant	-3.21747	-2.43069

Classification Matrix

Group	% Correct	# of cases classified into groups	
		Trespass	Breaking & Entering
Trespass	76.7	198	60
Break & Enter	58.8	42	60
Total	71.7	240	120